GEORGIA INSTITUTE OF TECHNOLOGY  
George W. Woodruff School of Mechanical Engineering  

ME 6404 Advanced Control System Design and Implementation  
Fall 2016  
http://singhose.marc.gatech.edu/courses/ME6404/index.html  

Lecture: M & W, 1:05 – 1:55 PM, MRDC 2405  
Lab: F, 2:05-2:55 PM, GTMI (MaRC) 268  

Lecturers: Professor William Singhose, GTMI 432, Singhose@gatech.edu  
Dr. Khalid Sorensen, KhalidS@gatech.edu  
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Course Objectives  
To learn advanced control and implementation techniques such as: optimal control, tracking control, repetitive control, adaptive control, and command generation. To work individually and in groups to realize simulated and actual working versions of advanced control techniques.  

Textbook  
Command Generation for Dynamic Systems  
http://www.lulu.com/content/621219  

Computer  
MATLAB will be used as a supplementary tool  

Course Requirements (100%)  
1) Introductory Lab (5%)  
2) Lab 2 (5%)  
3) Two-week group projects (Labs 3-5) (10%)  
4) Lab 6 (5%)  
5) Quiz #1 (10%)  
6) Final group project (20%)  
7) Quiz #2 (20%)  
8) Class Participation/Peer Reviews (5%)  

Group Projects: All names must be on the report and each group member will receive the same grade. You will be randomly assigned to different groups throughout the term.